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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,275	02/21/2002	Amardeep Singh	1030-20003	3048

23505 7590 11/04/2003

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EXAMINER

DANG, HOANG C

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/081,275

Applicant(s)

SINGH ET AL.

Examiner

Hoang Dang

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-3638-52 and 65-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,27 and 42 is/are allowed.
- 6) ☒ Claim(s) 23-25,28-34,38-41,43,44,47-52 and 65-68 is/are rejected.
- 7) ☒ Claim(s) 35,36,45 and 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

2. Claims 23, 24, 25, 28, 29, 30, 31, 32, 33, 34, 38 39, 40, 41, 43, 44, 47, 49, 50, 52, 65, 66, 67 and 68 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nguyen (US 5,494,123) (see "mud ramp" 48 Figures 1-2) or Coates (Re.32,495) (see "mud ramp" 22 Figures 1-3).

Contrary to applicant's argument, Figure 1 of Nguyen clearly shows ramp (near the lead line of reference numeral 48) being at an angle between 10 and 80 degrees to the longitudinal axis of the bit body as claimed.

Contrary to applicant's argument, the claimed structure does not distinguish from the drill bit of Coates. Whether mud or air is used as drilling fluid is considered an intended use and is given no patentable weight. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

As for claim 38, the bit body of either Nguyen or Coates has a cylindrical shape near the pin shoulder.

***Claim Rejections - 35 USC § 103***

3. Claims 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (US 5,494,123) or Coates (Re.32,495).

Both Nguyen and Coates disclose a first leg having a tapered backface. The exact angle of the backface is not disclosed by Nguyen or Coates. However, the use of an angle less than 1/2 degree is considered an obvious matter of design choice since it has not been shown that the angle of less than 0.5 degree is critical or unexpected.

4. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen or Coates.

Nguyen or Coates discloses the invention as claimed except that it is not disclosed that the cross-sectional area of the junk slot at the top of the mud ramp is at least 100% greater than that at the bottom of the nozzle boss. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed range in Nguyen or Coates since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

***Allowable Subject Matter***

5. Claims 26, 27 and 42 are allowed.

6. Claims 35, 36, 45 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

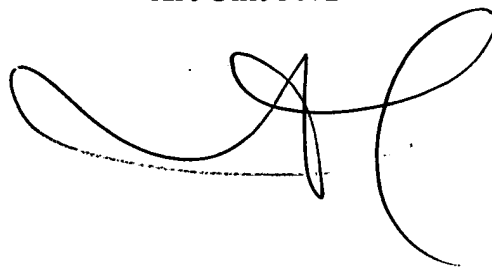
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 703-308-2149. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

**Hoang Dang**  
**Primary Examiner**  
**Art Unit 3672**

10081275.2fin  
November 1, 2003

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned below the printed name of the examiner.